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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,568	12/04/2003	Paul R. Coronado	IL-11286	8931
7590 03/24/2005		EXAMINER		
Ann M. Lee Assistant Laboratory Counsel			JOHNSON, EDWARD M	
Lawrence Livemore National Laboratory			ART UNIT	PAPER NUMBER
P.O. Box 808, L-703			1754	
Livermore, CA 94551		DATE MAILED: 03/24/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office A - 4i - m Community	10/728,568	CORONADO ET AL.				
Office Action Summary	Examiner	Art Unit				
	Edward M. Johnson	1754				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on <u>03 January 2005</u> .						
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This						
3) Since this application is in condition for allowar	)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-13</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>1-7</u> is/are allowed.						
6)⊠ Claim(s) <u>8-13</u> is/are rejected.						
7) Claim(s) is/are objected to.	•					
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) 🔲 Interview Summary (	(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	te				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal Pa	atent Application (PTO-152)				

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### DETAILED ACTION

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 7-8 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Courty et al. US 5,401,392.

Regarding claims 7-8, Frydman '600 discloses a product and process for making a waste treatment compound comprising providing hydrophobic silica gel on a carrier (see column 2, lines 5-7) and contacting with aqueous suspension (see column 2, lines 57-60).

Frydman '600 fails to disclose GAC carrier.

Courty '392 discloses an activated carbon support (see column 4, lines 50-55).

It is considered that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the activated carbon carrier of Courty in the a process for making a waste treatment compound of Frydman because Courty

discloses the activated carbon support in a process of making a compound for eliminating by-product waste even in batches containing hydrocarbon and/or sulfur (see column 2, lines 11-25).

Regarding claims 10 and 13, Frydman '600 discloses silicic acid (see column 2, lines 5-7), which would at least suggest a xerogel and acid washing to one of ordinary skill.

Regarding claim 11, Courty '392 discloses iron (see abstract).

Regarding claim 12, Courty '392 discloses an activated carbon support (see column 4, lines 50-55).

## Allowable Subject Matter

- 3. Claims 1-7 are allowed.
- 4. The following is a statement of reasons for the indication of allowable subject matter: The composition comprising the mixture consisting essentially of a dried hydrophobic sol-gel functionalized with at least one arsenic-removing constituent and a solid support, of the instant claim 1, would not have been obvious to one of ordinary skill in the art at the time the invention was made. The composition comprising a predetermined amount of hydrophobic aerogel and granulated activated carbon, capable of removing arsenic from aqueous media, of the instant

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claim 7, also would not have been obvious to one of ordainry skill in the art at the time the invention was made.

## Response to Arguments

5. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

- 6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kitahara et al. US 4,996,030 discloses a method for cleaning an exhaust gas comprising arsine comprising contacting with manganese oxide an silicon oxide (see abstract and Examples).
- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M. Johnson whose telephone number is 571-272-1352. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WWW. Non Edward M. Johnson

Examiner

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**EMJ**